Amendments to the drawings,

There are no amendments to the Drawings.

Remarks

Status of application

Claims 1-59 were examined and stand rejected in view of prior art. The claims have been amended to further clarify Applicant's invention; however, these amendments to the claims are not intended to narrow the scope of Applicant's invention. In view of the amendments to the claims and the below remarks, reexamination and reconsideration are respectfully requested.

The invention

Applicant's invention enables users to collect and combine content from a number of different sources in a manner which provides real-time, interactive (i.e., user driven) content aggregation. Applicant's invention introduces the concept of a "messaging portlet", which is a portlet that participates in sharing information between itself and other messaging portlets, without requiring the messaging portlet to have any knowledge of any other portlet, its parameter requirements, or its subsequent actions. The messaging portlets of Applicant's invention are autonomous from other messaging portlets, from the hosting application server, and from the container in which they are enclosed. A messaging portlet can be viewed as an object with well defined messages that are broadcast to other objects that have registered to listen for specific message content. By using well-defined message definitions Applicant's messaging portlets can participate intelligently in combination with other portlets which a user may collect from a variety of different sources.

Applicant's messaging portlets enable a user to collect components from many different sources (e.g., Web sites available via the Internet) and to create an integrated collection of interactive messaging portlets. The use of messaging portlets created in accordance with the present invention provides users with powerful tools for collaborating with other users, as well as for developing new business process and analysis techniques. An advantage of the architecture Applicant's invention is that one or more of Applicant's messaging portlets can be deployed on any "common" Web server, and be viewed from any common browser as implementation of Applicant's invention does not require any operating system or browser specific code.

Applicant's invention also includes an innovative user interface and associated tools that makes it easy for users to select and collect content and use the collected components create and implement messaging portlets. A user without extensive technical skills or training can use Applicant's invention to identify, extract, retrieve, and use content in situations that previously required complex development tasks by skilled programmers.

General

A. Non-statutory subject matter rejection

Claims 1-3, 5-24, 26-41 and 59 stand rejected under 35 U.S.C. 101 on the basis of non-statutory subject matter. Here, as to claims 1-3, 5-24 and 26-41 the Examiner rejects the claiming of retrieval of particular content for display without indication of a useful, concrete and tangible result or output obtained by these claim limitations. However, the Examiner indicates that Applicant's claim 4 and claim 25 include the tangible result of displaying the content. Accordingly, Applicant has amended independent claims 1 and 22 to include claim limitations of displaying the content, thereby overcoming the Section 101 objection. As claims Claims 2-3 and 5-21 depend on claim 1 and claims 23-24 and 26-41 depend on Claim 22, the Section 101 objection as to these claims is similarly overcome by the amendments to Applicant's independent Claims 1 and 22.

The Examiner has also rejected claim 59 on the basis of non-statutory subject matter stating that a downloadable set of processor-executable instructions is directed towards software and that software per se fails to produce a useful, concrete and tangible result. The claim has been amended to couch the claim limitation in terms of a process step, thereby overcoming the rejection.

Prior art rejections

A. Section 102 rejection: Ng et al.

Claims 1-9, 12-14, 17-30, 33-35, 38-48, 51-52 and 54-59 stand rejected under 35 U.S.C. 102(b) as being anticipated by US PGPub 2006/0053376 to Ng et al (referred to hereinafter as "Ng"). The Examiner's rejection of Applicant's Claim 1 as follows is representative of the rejection of Applicant's claims as anticipated by Ng:

> Referring to claim 1, Ng et al disclose a method for interactive content retrieval and display (see abstract), the method comprising:
> providing a plurality of portlets for retrieval of content for display in a user interface (see [0088] and [0179]);
> mapping a message action to a first portlet to create a messaging portlet for sending a message in response to user interaction with the messaging portlet (see [0211], [0219] and [0222]-[0223] - the message is mapped to the master portlet which is considered to represent the *first portlet*);
> creating a listener portlet by registering a second portlet to receive messages from the messaging portlet (see [0211], [0213], [0220] and [0225]-[0226] - the slave portlets are considered to represent the *listener portlet*); and
> in response to user interaction with the messaging portlet, retrieving particular content for display in the user interface based on the message received by the listener portlet from the messaging portlet (see [0176], lines 5-8 and [0214], lines 3-5 and [0231] - the slave portlet performs the action of retrieving the data from the web application in order to display the data in the user's browser).

Under Section 102, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in the single prior art reference. (See, e.g., MPEP Section 2131.) As will be shown below, Ng fails to teach each and every element set forth in Applicant's claims1-9, 12-14, 17-30, 33-35, 38-48, 51-52 and 54-59 (as well as other claims), and therefore fails to establish anticipation of the claimed invention under Section 102.

Although both Applicant's invention and the system of Ng discuss the concept of portlets, there are a number of differences between Applicant's invention and Ng as hereinafter described. One initial difference is that in the system of Ng the portlets serve as a front end to a specific back-end Web application (Ng, Fig. 2). Ng provides for display to a user of a Web portal composed of related portlets with the portal serving to provide access to the back-end Web application (Ng, abstract and paragraphs [0051]-[0052]). This is described, for example, at paragraph [0129] of Ng:

> "...portlets in the same portlet application work in synchronization to update the backend web application being used. The effect is that the end user sees a unified view of the backend web application through multiple portlets.
>
> (Ng, paragraph [0129])

Thus, the central focus of Ng's solution is to provide one carefully designed Web front

end to a particular back-end application implemented under an architected application framework.

In contrast, Applicant's invention enables a user to collect and aggregate dynamic content from several different sources and use the collected content to create portlets that interact with each other (Applicant's specification, paragraphs [0162]-[0164]). This allows the user to create a personalized Web page generated from user-selected components and add message actions to the component portlets so as to create "messaging portlets" which interact with each other in response to user input. This is illustrated, for example, at Fig. 6 of Applicant's specification with a page composed of three components: a symbol list portlet, an address portlet and a map portlet. The symbol list portlet reads a database table for a list of company stock symbols and converts this to an HTML table (Applicant's specification, paragraph [0139]). The address portlet, in this same example, reads the address from the database and displays the address as a set of HTML form text entry fields (Applicant's specification, paragraph [0140]). The map portlet is a capture of a Yahoo map based on the postcode (zip code) of the address template (Applicant's specification, paragraphs [0141] and [0152]). Thus, Applicant's invention enables a user to select and capture content from different sources and use them in combination. Applicant's invention is not merely a front-end to a specific Web application, but rather allows a user to select and aggregate components in building highly personalized and customized Web pages including content drawn from a number of different sources.

Applicant's claims have been amended in an effort to more clearly indicate these features of enabling a user to select and aggregate content from different sources. For example, Applicant's amended claim 1 includes the following limitations:

> A method for interactive content retrieval and display at a computer connected to a network and having Internet access, the method comprising:
> providing a plurality of portlets selected by a user from a plurality of sources available via the Internet for retrieval of content for display in a user interface of the computer;
>
> (Applicant's amended claim 1, emphasis added).

Applicant's review of Ng finds no comparable teaching of a user selecting content

from different sources available via the Internet and using the selected material as components in building an interactive Web page in the manner described in Applicant's specification and claims. Instead, Ng is focused on providing a Web application programming framework for use by application developers in developing a Web portal interface to a specific back-end application (Ng, abstract and paragraphs [0051]-[0052]).

Unlike Ng's system, Applicant's invention is not pre-programmed to display particular information (e.g., particular information specified in advance by the developer of the Web application). Instead, Applicant's invention enables a user (e.g., end user or content manager) to select items for display in the user interface, combine them with other items, modify or delete the displayed items, and add or modify actions associated with them (Applicant's specification, paragraphs [0160]-[0164]). Applicant's invention enables a user to select and use components which may have been developed by someone else for different purposes (e.g., the Yahoo map in the above-described map portlet) and which were not intended by the original developer to be combined or aggregated together with other components (portlets). In this manner, a user can create a new Web page containing interactive portlets based on existing components selected by the user. In many cases these existing components were likely created by third parties without any concept that they would later be combined and used interactively with the other components selected by the user. Applicant's invention enables a user to select portlets to be added to a page (e.g., based on user choice and personalization preferences) rather than merely displaying a fixed set of tightly coupled portlets (Applicant's specification, paragraphs [0185]-[0186]). A user can then add messaging actions to one or more portlets such that user interaction with one portlet may cause actions to be taken in other portlets on the page as hereinafter described.

In addition to providing users with flexibility in selecting and capturing particular content for use as components of a Web page displayed in the user interface, Applicant's invention also provides users with the ability to specify how the selected components interact with each other and define what information is displayed in response to events (Applicant's specification, paragraph [0164]). This is possible because the messaging portlets of Applicant's invention are autonomous and are not dependent upon other portlets (Applicant's specification, paragraph [0104]). They are designed to be

autonomous from other messaging portlets, from the hosting application server, and from the container in which they are enclosed (Applicant's specification, paragraph [0071]). With Applicant's invention, the portlets are not only autonomous, but are also independent in that none of the portlets need to know anything about the other portlets. Each could have different authors, be written using different technologies, and so forth but Applicant's invention enables these completely autonomous objects to be aggregated together and to interact with each other.

Applicant's invention enables a user to easily and simply establish and modify relationships between these loosely coupled components and how they interact with each other in response to events (Applicant's specification, paragraphs [0162] and [0104]). Communication amongst these autonomous components is coordinated by using a central registration point (registrar) for the messaging portlets and providing that portlets which are to receive messages (listener portlets) register with the registrar (Applicant's specification, paragraph [0105]). Portlets that are expected to send information (actioner portlets) are not required to register. The registrar itself is not a portlet, but rather is a function for tying together messaging portlets (Applicant's specification, paragraph [0105]). In operation, when the registrar receives a notification from an actioner portlet, the register looks up the registered listener portlets and notifies each of them in turn (Applicant's specification, paragraphs [0106]-[0107]). This registration process is specifically described in Applicant's claims including, for example, the following limitations of Applicant's claim 1:

> in response to user input, mapping a message action to a first portlet to create a messaging portlet for sending a message to a registrar in response to user interaction with the messaging portlet;
> creating a listener portlet by registering a second portlet selected by the user with the registrar to receive messages from the messaging portlet;
> in response to user interaction with the messaging portlet, retrieving particular content for display in the user interface based on the message received by the listener portlet from the messaging portlet; and
> displaying the particular content in the user interface.
>
> (Applicant's amended claim 1, emphasis added)

Unlike the autonomous, loosely coupled portlets of Applicant's invention which

can be added or modified by a user, the child or "slave" portlets of Ng are tightly coupled and are created with the goal of integrating the portlets into a specific, pre-programmed application. In Ng's system portlets are bound to each other as a given "slave" portlet of Ng is controlled by a particular master at the time of application development (Ng, Fig. 1 and paragraphs [0199]-[0200]). In the system of Ng, the relationship between the "master" and "slave" portlets are established in advance (e.g., by the developer of the back-end Web application) in a "Dynamic Context Relationship Template" (Ng, paragraphs [0199]-[0206]). Thus, with Ng's approach, the information that is to be exchanged and how the exchange is to occur is specified in advance, hard-coded and well defined. All decisions about what behavior is to occur in response to various events are specified by application developer at time of creation of application. This is not the same as Applicant's approach where an end user can flexibly select component portlets and specify the manner in which the components interact with each other.

Further points of distinction between Applicant's invention and that of Ng are shown in Applicant's dependent claims. For example, Applicant's claim 13 provides that the afore-mentioned registrar for exchange of messages between portlets is located in a browser window. The Examiner references Ng as containing this teaching; however review of the cited portion of Ng finds that it discusses a cookie in a cookie table for mapping an http request of a portlet application http client to a back-end server (Ng, paragraph [0123]). More generally, Ng's system differs from that of Applicant as Ng relies on server-side infrastructure for controlling the interaction and sharing of information by associated portlets. This is further illustrated, for example, at paragraph [0067] of Ng which describes an apparatus for sharing information between multiple associated portlets as including the following:

> "...a portlet application for managing the multiple associated portlets; a portlet application data store; means for granting read/write access to the data store by the multiple associate portlets to enable the portlets to exchange data among each other."
>
> (Ng, paragraph [0067]).

In contrast to Ng's system which relies on server-side components to coordinate the interaction and sharing of information by the portlets, Applicant's invention provides

for the interaction of the portlets to be controlled from the browser on the client side and does not require server-side infrastructure. As previously described, the messaging portlets of Applicant's invention are autonomous from other messaging portlets, from the hosting application server, and from the container in which they are enclosed (Applicant's specification, paragraph [0071]). This enables a user to combine components from various different sites (e.g., from Google, Yahoo, CNN.com or the like) for display in the user interface (browser). What is displayed is not controlled by, and does not require interaction with, a particular back-end application server as with the system of Ng. Instead, Applicant's invention enables different users to add and remove components, modify the interaction of these components with each other and the like without the need to agree in advance about how all of the components fit together and interact.

All told, Ng provides no teaching of an interactive system for retrieval, aggregation and display of content selected by a user from sources of content available via the Internet in a manner in the manner described in Applicant's claims. Therefore, as Ng does not teach or suggest all of the claim limitations of Applicant's claims 1-9, 12-14, 17-30, 33-35, 38-48, 51-52 and 54-59 (and other claims) it is respectfully submitted that the claims distinguish over this reference and overcome any rejection under Section 102.

B. Section 103(a) rejection: Ng in view of Witwer

The Examiner has rejected claims 15-16, 36-37 and 53 under 35 U.S.C. 103(a) as being obvious over Ng (above) in view of US PGPub 2004/0098360 to Witwer et al (referred to hereinafter as "Witwer"). The Examiner relies on Ng as substantially teaching the claimed invention (as per the Examiner's rejection under Section 102 above), but acknowledges that Ng fails to disclose the limitations of implementing messaging portlets and sending broadcast messages from a messaging portlet to a listener portlet using JavaScript. The Examiner states that it would have been obvious to one of ordinary skill in the art to use Witwer's method of implementing messaging portlets using JavaScript with Ng's method of using messaging portlets so as to provide web authors the ability to embed programming instruction within the HTML text of their Web page.

Under Section 103(a), a patent may not be obtained if the differences between the

subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. To establish a prima facie case of obviousness under this section, the Examiner must establish: (1) that there is some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) that there is a reasonable expectation of success, and (3) that the prior art reference (or references when combined) must teach or suggest all the claim limitations. (See e.g., MPEP 2142). As will be shown below, the Ng and Witwer references, even when combined, fail to meet the requisite condition of teaching or suggesting all of Applicant's claim limitations.

Initially, the claims are believed to be allowable for at least the reasons cited above (as to the Section 102 rejection) pertaining to the deficiencies of Ng as to Applicant's invention. Witwer does not cure these deficiencies of Ng. Although Witwer does reference Javascript, it simply teaches that other types of content or tools, such as Javascript or video, can be contained within a portlet (Witwer, paragraph [0038], lines 10-12). However, Witwer provides no teaching of messaging portlets as described in Applicant's specification and claims nor does Witwer provide the specific teachings of using Javascript for messaging between portlets as provided in Applicant's claims 15-16, 36-37 and 53. Accordingly, as the prior art reference(s), even when combined, fail to teach or suggest all the claim limitations, it is respectfully submitted that Applicant's claimed invention as set forth by these claims is distinguishable over the two references, and that the rejection under Section 103 is overcome.

C. Section 103(a) rejection: Ng in view of Hauser

The Examiner has rejected claims 10-11, 31-32 and 49-50 under 35 U.S.C. 103(a) as being obvious over Ng (above) in view of US PGPub 2004/0002944 to Hauser et al ("Hauser"). [Although paragraph 8 of the Office Action initially refers to Witwer (above), the Examiner confirmed by phone that this rejection was intended to refer to Hauser.] Here, the Examiner relies again on Ng as substantially teaching Applicant's claimed invention, but acknowledges that Ng fails to disclose the limitations of structuring a

messaging portlet as a HyperText Markup Language (HTML) inline frame. The Examiner adds Hauser for the teaching of a method for integrating applications wherein a messaging portlet is structured as a HyperText HTML inline frame and states that it would have been obvious to one of ordinary skill in the art to use Hauser's feature of inline frames with Ng method of messaging portlet so as to improve the efficiency of the portlets.

Applicant's claims are believed to be allowable for at least the reasons cited above (as to the Section 102 rejection and the first Section 103 rejection above) pertaining to the deficiencies of Ng as to Applicant's invention. Hauser does not provide any teaching of messaging portlets that cures any of these deficiencies of Ng. Hauser merely states that a display panel can include user interface as portlets, iViews, or HTML frames. Applicant's review of Hauser finds that Hauser makes no mention of structuring a messaging portlet using an HTML inline frame in the manner described in Applicant's claims. Thus, as the Ng reference, even when combined with Hauser, does not teach or suggest all the claim limitations, it is respectfully submitted that Applicant's claimed invention is distinguishable over these references, and that the rejection under Section 103 is overcome.

Any dependent claims not explicitly discussed are believed to be allowable by virtue of dependency from Applicant's independent claims, as discussed in detail above.

Conclusion

In view of the foregoing remarks and the amendment to the claims, it is believed that all claims are now in condition for allowance. Hence, it is respectfully requested that the application be passed to issue at an early date.

If for any reason the Examiner feels that a telephone conference would in any way expedite prosecution of the subject application, the Examiner is invited to telephone the undersigned at 408 884 1507.

Respectfully submitted,

Date: September 26, 2006

Digitally signed by John A. Smart
Date: 2006.09.26 14:26:31 -07'00'

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